

[NOTE: This layout and wording of this document may differ somewhat from that of the published version. Consult the published paper or its scanned image before quoting any passage.]

Voodoo Economics? Reviewing the Rational Choice Approach to Religion

Laurence R. Iannaccone
Department of Economics
Santa Clara University

November 1994

*Direct all correspondence to Laurence R. Iannaccone, Department of Economics, Santa Clara University, Santa Clara, CA 95053. I thank David Bromley, Roger Finke, Dan Olson, Stephen Warner, and an anonymous referee for their suggestions and criticisms.

***Abstract:** The rational choice approach attracts various criticisms, many of them unfounded. This essay defends rational choice as a powerful paradigm for the scientific study of religion. The paradigm unifies a wide range of empirical findings, generates new hypotheses to guide future research, and proves relevant to both contemporary and historical settings.*

Rational choice theory has entered the study of religion, and with it come concerns about its nature and value. So far, a single application of rational choice — the "religious markets" alternative to secularization theory — has attracted the most attention, applause, and condemnation (Warner 1993). But some have questioned the entire approach, and more critiques are on the way (Bruce 1993, Monroe [in press], Robertson 1992, Young [in press]). Questions are only natural given the tendency to view religion as "less rational" than other aspects of culture — a sacred realm "set apart" from the profane, a realm walled off from the "calculation of utility" (Wuthnow 1991:273, Durkheim 1965:62, Parsons 1968:412). They are reinforced by an unfortunate but longstanding tradition distinguishing economics from sociology on the basis of rational versus nonrational action, to say nothing of other traditions that view religion as outright *irrationality*, escapism, or psychopathology (Swedberg 1990:11,13, Freud [1927] 1961:88).

This essay defends the rational choice approach to the study of religion.¹ It seeks to complement, but not reiterate, an earlier review of specific models and applications (Iannaccone 1992a). The arguments are frankly utilitarian — promoting rational choice as an approach that has borne considerable fruit in the social sciences, an approach well-suited to the task of building and testing formal models of human behavior, and above all an approach whose implications for religious behavior have yet to receive sufficient attention. Since there exists already a large body of scholarship debating the philosophical

foundations and overall merits of rational choice, I will confine my attention to issues that have special relevance for religion. Readers interested in the broader issues and applications should consult Coleman (1990), Elster (1986), and Etzioni (1988).

Defining the approach

Gary Becker (1976:5) has characterized the essential features of the rational choice approach as the "combined assumptions of maximizing behavior, market equilibrium, and stable preferences, used relentlessly and unflinchingly." Although Becker's "relentlessly" utilitarian analysis of subjects like "the demand for children" provokes anger in some and incredulity in others, I do believe his list goes to the heart of the matter.

Of the three assumptions, maximizing behavior is fundamental. It is, however, a simplifying *assumption* to be employed and assessed within the context of predictive models that are themselves simplified representations of reality. The assumption implies that people approach all actions in the same way, evaluating costs and benefits and acting so as to maximize their net benefits. Hence people choose what religion, if any, they will accept and how extensively they will participate in it. Over time, most people modify their religious choices in significant ways, varying their rates of religious participation and modifying its character, or even switching religions altogether. Following assumption of stable preferences, the rational choice theorist is almost never content to explain such changes with reference to changed tastes, norms, or beliefs. The theorist seeks instead to model changes as optimal responses to varying circumstances — different prices, incomes, skills, experiences, resource constraints, access to different technologies, and the like.

Similar simplifying assumptions apply to religion's supply side. Religious "producers" are also viewed as optimizers — maximizing members, net resources, government support, or some other basic determinant of institutional success. The actions of church and clergy are thus modeled as rational responses to the constraints and opportunities found in the religious marketplace.

The combined actions of religious consumers and religious producers form a religious market which, like other markets, tends toward a steady-state equilibrium. As in other markets, the consumers' freedom to choose constrains the producers of religion. A "seller" (whether of automobiles or absolution) cannot long survive without the steady support of "buyers" (whether money-paying customers, dues-paying members, contributors and coworkers, or governmental subsidizers). Consumer preferences thus shape the content of religious commodities and the structure of the institutions that provide them. These effects are felt more strongly where religion is less regulated and, as a consequence, competition among religious firms is more pronounced. In competitive environments, religions have little choice but to abandon inefficient modes of production and unpopular products in favor of more attractive and profitable alternatives.

Beyond these three rather distinctive assumptions, the rational choice approach retains the commitment to empiricism and objectivity that scholars routinely ascribe to the scientific study of religion (McGuire 1987:4, Roberts 1990:29). To see how all these pieces come together in a new theory of church and sect, see Iannaccone (1994); to see the theory modeled within a dynamic framework, see Montgomery (1994). For an overview of specific rational choice models, see Iannaccone (1992a, [in press - B])

Integrating and explaining

Rational choice provides a broad paradigm for social scientific research. Although this very fact evokes skepticism among some,² it does address a major failing of contemporary religious research. Robert Wuthnow (1988:500) states the matter plainly:

In viewing the sociology of religion as a whole ... it appears regrettable that the field has grown more rapidly in inductive empirical research and in subspecializations than it has in attempts to identify theoretically integrative concepts The problem is not one of lively disagreement over serious intellectual disputes but an absence of unifying constructs ...

Stark and Bainbridge (1987:11) echo Wuthnow's sentiment, noting that despite "a major rebirth" leading to "an amazing variety of new and well-tested facts,"

... no sustained effort has gone into creating theories to give order and relevance to these facts. Indeed, there has been little theorizing about religion since the turn of the century."

Rational choice seeks to fill this gap by integrating numerous predictions within a single conceptual framework and providing theoretical explanations for observed empirical regularities.

To summarize these contributions, it helps to distinguish three levels of analysis: the level of individuals and households; the level of congregations, denominations, and other groups; and the level of entire communities or societies. At the individual level, "human capital" models of religious participation explain observed patterns in

denominational mobility, religious intermarriage, conversion ages, the relationship between church attendance and contributions, and the influence of upbringing and interfaith marriage on levels of religious participation (Iannaccone 1990, c.f. Sherkat and Wilson 1993, Lee 1992). At the level of religious groups, new models of church and sect account for the strength of strict churches, the dynamics of denominational change, and the empirical correlates of sectarianism: costly demands, definite conversions, high levels of religious participation, lower-class and minority appeal, and so forth (Iannaccone 1988, 1992b, 1994; Montgomery 1994; Stark and Iannaccone 1993). At the level of entire communities and societies, models of religious markets and religious regulation challenge the predictions of secularization theory, asserting instead the vitality of religion in pluralistic settings (Iannaccone 1991a, Finke 1992, Finke and Iannaccone 1993). For a discussion of research at all three levels, see Iannaccone (1992a, [in press - B])

Steve Bruce (1993) has criticized much of this work, particularly the human capital model. He argues that the data supporting many of its predictions also fit alternative explanations. According to Bruce, data on denominational mobility can be explained "perfectly well without economic metaphors" if we instead suppose that "beliefs 'sediment' so as to shape our receptivity to future alternatives" (1993:198). Data on conversion ages are "compatible" with the explanation that "the plausibility of beliefs is a product of (a) social interaction with other like-minded believers, and (b) the extent to which those beliefs produce a satisfactory understanding of the world and one's place in it" (1993:199).

Intermarriage patterns can be explained by noting that "churches provide an excellent venue for meeting young people who are similar not only in religion but also in social

class, culture and ethnic background" (1993:199). And the higher rates of church attendance that characterize shared-faith marriages fit the alternative hypothesis that "a significant other who reinforces [one's own] beliefs will have a profound impact on the strength of one's faith and hence on the enthusiasm with which one participates in collective expressions of such beliefs" (1993:200).

Ironically, this critique corroborates the very strengths of the human capital model. It does not expose flaws in the model's internal logic, nor does it refute its empirical success — it simply proposes *other* explanations for four of the model's predictions. But this is equivalent to conceding that the model indeed lives up to its billing. The model *does* integrate numerous predictions within a single conceptual framework and *does* fit that data. True, we can devise an "alternative explanation" for each of the phenomena in question — asserting first social sedimentation, then plausibility, then dating venues, and finally mutually reinforcing beliefs. Having done so, however, it is not at all clear how these distinct and largely *ad hoc* stories sum to any overall model of religious participation. Nor is it clear how they fit within more general and generally accepted theories of behavior. On the other hand, we can pull all the pieces together with a single, relatively simple model that posits rational choice and the formation of human capital, thereby linking the analysis of religious participation to a large body research on household production and capital accumulation.

New questions and hypotheses

The rational choice approach also generates new questions, new methods, and new hypotheses.

For a small example, consider again the human capital model. It predicts that people will not "produce" religion in just one way (involving, say, two hours of church attendance, twenty dollars of contributions, and thirty minutes of prayer each week), but will instead alter their "input ratios" as the value of their time changes (Iannaccone 1990: 310-312).³ Just as businesses seek to conserve on labor when wage rates rise (turning perhaps to automated assembly lines), and just as parents seek to conserve on their household time when both work in the labor force (turning perhaps to more convenience foods and landscaping services), so also church members will shift to more "money-intensive" forms of religious activity when their value of time increases. In practice, this means that people with high wage rates will tend to contribute more money *relative* to their rates of church attendance, and people with low wage rates will tend to contribute fewer dollars per hour of church they attend. More importantly, congregations and denominations with higher average wage rates will tend to adopt more money-intensive (time-saving) styles of worship: shorter services, more reliance on professional staff, larger and more costly facilities, more reliance on purchased goods and services, and less reliance on volunteered labor. These predictions have no precedent within traditional models of religious participation, yet they receive both statistical and anecdotal support.

At the level of communities and countries, rational choice models yield a series of hotly-contested predictions concerning the vitality of competitive religious markets and the stultifying effects of state-sponsored religious regulation. The market model of religion and its challenge to traditional secularization theory have already received a great deal of attention and need not be repeated here. It suffices merely to acknowledge the model's capacity to invigorate old debates (about secularization, pluralism, and American exceptionalism) with a fresh perspective and new predictions (Hadden and Pankhurst 1993, Iannaccone 1991a, Finke and Stark 1992, Warner 1993).

Rational choice directs our attention to other issues, so obviously important that one wonders at their historic neglect. It is, for example, nearly impossible to speak of the costs and benefits of religion without inquiring into the money that people devote to it (Ehrenberg 1977, Sullivan 1985). It is equally impossible to observe or participate in organized religion, without recognizing the necessity to finance the enterprise. Yet, prior to the 1980's, virtually no surveys of religious behavior asked people about their contributions.⁴ Indeed, the subject received no attention at conference sessions of the ASR, RRA, SSSR or the pages of their respective journals, even after Andrew Greeley and William McManus (1987) wrote a book on contributions and NORC added a contributions question to its General Social Surveys. (It finally began to generate interest in the 1990's, when the Lilley foundation began offering large grants to study the financing of American religion.)

One is reminded of Kingsley Davis' (1937) pathbreaking sociological study of prostitution — the first, it seems, to emphasize that money changed hands. A student will

search in vain through most texts in the sociology of religion for an extended discussion of the determinants of religious giving or the ways in which groups finance their activities (e.g, Argyle and Beit-Hallahmi 1975, McGuire 1987, Roberts 1990, Yinger 1970). This omission may reflect a reluctance to deal with economic issues from a sociological perspective, a refusal to accept the importance of the subject or simply a pervasive oversight. But whatever the cause, it highlights an obvious contribution of the rational choice approach.

Traditional research also neglects the *time* that people devote to religion. Countless studies of church attendance would appear to prove otherwise, but closer examination reveals that nearly every study treats attendance as just another "dimension" of religiosity or attribute of the individual. The field seems to have overlooked the critical difference between church attendance and a religious attitude. Attendance takes time, time that has an opportunity cost because it preempts other activities, and time that can be *measured* by researchers. It seems silly to have hundreds of surveys that ask people questions like "Did you, yourself, happen to attend church last week?" but scarcely any that ask them how many *hours* they devoted to religious activities last week or how those hours were divided among private worship, attendance at public worship services, and involvement in other group meetings and activities.

In contrast, rational choice all but requires the study of time and money and its consequences. Iannaccone, Olson, and Stark (in press) emphasize this point, and show that contributed time and money "produce" membership growth at both congregational and denominational levels. They also show that different measures of a religion's

resources (such as membership, attendance, weekday involvement, and money contributions) yield very different estimates of the relative size, strength, and "market share" of various denominations.

Beneath the measure of time and money lie more fundamental questions about the costs and benefits of religious activities. Iannaccone (1992b, 1994) provides a cost-benefit explanation for the strength of strict churches and the observed empirical regularities that came to be known as church-sect theory. Rather than argue the abstract merits of such explanations or debate the extent to which religious socialization alters perceptions of cost and benefit, I would draw attention to just one point. There are very few survey items (in the GSS, national polls, denominational surveys, or special studies designed and administered by scholars of religion) that even *try* to assess the perceived costs of religious practice; nor is there much attention to perceived benefits. Instead, we find psychological batteries, attitude measures, belief inventories, affiliation items, and a few behavioral measures. The value of cost-benefit models will remain hard to assess (but impossible to dismiss) until we begin asking people what they have sacrificed for the sake of their faith.

Similar observations apply to many other economic concepts — market equilibrium, the free rider problem, the theory of monopoly, the concept of production, and more. But I will conclude this section with a single example of rational choice leading to insights that otherwise remain unthinkable or unthought.

While arguing that religion falls beyond the limits of economic rationality, Bruce (1993:202) asserts that "one cannot hedge one's bets by buying only a small amount of a

religion ... we cannot regard religious promiscuity as a form of rational diversification of investment." This certainly sounds reasonable, and it accords with the standard sociological assumption that calculations are "off limits" when it comes to a great many areas of human behavior (Etzioni 1988). But by taking it for granted, one ignores a fascinating set of possibilities that I have labeled the theory of "religious portfolios."

The theory builds from the fact that religions are risky business. Their fundamental assertions lie within a realm of "radical uncertainty" beyond the range empirical verification (Wuthnow 1988:494, Stark and Bainbridge 1987:39). Hence, subscribing to a religion is a bit like buying stock. A natural strategy for dealing with such risk is to hedge one's bets. "Pascal's Wager" advocates one such hedge, trading finite losses in this life for the possibility of infinite rewards in the next. But other hedging strategies apply to the *content* of religiosity. "Religious investors" will be tempted to diversify their own religious portfolios, devoting their time and money to a variety of different religions, dabbling in, say, astrology, Methodism, meditation, and so forth. As I argue in Iannaccone ([in press - A]), this unexpected prediction receives a great deal of empirical support when it is combined with the rational-choice theory of "strict churches." Together they yield an elegant typology, contrasting "collective" religions (which emphasize exclusive membership, employ sacrifice and stigma, maintain high levels of participation, and view all members as co-workers) and "private" religions (which obtain little or no brand loyalty, permit diversification, average low levels of participation, and focus on fee-for-service transactions). Western religions, particularly their more sectarian variants, exemplify the first type. Asian religions, New Age religion, and Greco-Roman paganism

exemplify the second. I mention the theory of religious portfolios, not to suggest that one should accept its merits sight unseen, but rather to emphasize how a rational choice perspective leads to hypotheses and data that otherwise are overlooked or rejected out of hand.

Resonance and realism

Critics often complain that rational choice models house "unrealistic" assumptions. Bruce, for example, notes that a "very obvious criticism that can be made of the economic approach is that it has little resonance with the understandings of the people whose behavior it must explain" (Bruce 1993:200, see also Etzioni 1988:17, Ferree 1992, Swedberg 1990). There is, of course, a longstanding philosophical debate over the importance of realism (Boland 1979). One is hard-pressed, for example, to defend relativistic or quantum-mechanical models of the universe as more intuitively plausible than their Newtonian predecessor. But for the sake of argument, let us accept the notion that, other things being equal, a social-scientific explanation is to be preferred if its underlying assumptions accord with perceived reality and/or resonate with people's self-described behavior, motivations, and the like.

I would argue that from casual conversation to biblical commands, we find language that is compatible with, and often equivalent to, cost-benefit terminology. In this sense rational choice theory is at least as realistic and plausible as alternative interpretations. The basic issue, after all, is whether people attend to costs and benefits and act so as to maximize their net benefits. The principle alternative is unreflective action

based on habit, norms, emotion, neurosis, socialization, cultural constraints, or the like⁵ — action that is largely unresponsive to changes in perceived costs, benefits, or probabilities of success.

Consider the utilitarian admonitions that fill the Bible. "Honor your father and mother, that your days may be long in the land" (Exodus 20:12). "Behold, I set before you a blessing and a curse: the blessing if you obey ... and the curse if you do not" (Deut 11:26). "Take delight in the Lord, and he will give you the desires of your heart" (Psalm 37:4). Consider the investment-oriented appeals to faith: "Do not lay for yourself treasures on earth where moth and rust consume and where thieves break in and steal, but lay up for yourselves treasures in heaven" (Matt 6:19). Consider the economic metaphors: Cast not your pearls before swine; the kingdom of heaven is like treasure hidden in a field; the kingdom heaven is like a merchant in search of fine pearls. Consider the crowds who followed Jesus, and who follow today, in response to reports of miracles — an indication (insofar as they are believed) that the probability of divine presence is high and the possibility of personal benefits is great.

Turning to ordinary speech and survey data, note that regular church attenders are far more likely than others to view their religion as personally beneficial and satisfying. They more often believe in other-worldly benefits (heaven) and costs (hell). They impute higher probability to the existence of God. They express more satisfaction with their denomination, congregation, pastor, church-based friendships, and the like. Similar cost-benefit factors differentiate religious "dropouts" from those who remain active in their faith (Hoge 1981). Some readers might discount these facts as obvious and

uninformative. But they are obvious only to the extent that we adopt (or accept that others adopt) a utilitarian perspective, persisting in behaviors perceived as beneficial and avoiding those perceived as costly. Other readers might reject people's own statements, arguing that they merely reveal the natural tendency to rationalize actions that are, in fact, determined by norms, habit, social pressures, and the like. But even if this were so, we are left with instrumental, utilitarian language as a natural way people describe and defend their behavior.

The irony here is that many non-rational constructs resonate *less* well with people's own statements. Ordinary people do not describe their religious beliefs or behavior in terms of plausibility structures, status incongruity, boundary maintenance, or their equivalents. They scarcely acknowledge the possibility of doing what they do because they were socialized to do it. Rather they speak of the truth (i.e, the high probability) of their view, the blessings (benefits) that accompany it, and the curses (costs) that accompany its alternative. They admit temptation (yearning for the benefits they sacrifice to garner future blessings) and backsliding (when their degree of certainty falls or the lure of worldly pleasures overwhelms the decision to wait for heavenly rewards). If we ask them to assess the dollar cost or utility gain of attending a Sunday services, they will surely balk. But they readily concede that people are drawn to faith and fellowship that "satisfy their spiritual needs."

Pervasive principles

Utilitarian language may proliferate and yet utilitarian principles may fail to account for religious behavior; people may say one thing and do another. But here again, one finds strong *prima facie* evidence that people both talk and act in accordance with rational principles.

Consider the short list of basic economic theorems given by Gary Becker (1976:5-6) and quoted by Bruce (1993:194-195, see also Robertson 1988:154). They include the laws of demand and supply, the invisible hand theorem (asserting the superior efficiency of competitive markets), and the principle that taxing a commodity or activity reduces the amount that is produced. I would assert that it is nearly impossible to imagine these principles *not* applying to religious behavior. Moreover, even when they do (apparently) fail to apply, there is much to be gained from asking why.

The law of demand is by far the most basic economic principle, so basic that it applies to laboratory animals (Kagel, et. al. 1975). As Becker (1976:151-168) has demonstrated, it is more a consequence of budget constraints than rationality, so that even those who act randomly or habitually tend to consume less when prices rise.

Does religious behavior violate this law? Consider church attendance. Consider a particular church member who averages two or three meetings a month, and consider an event that increases the "price" of attendance, other things remaining equal. Imagine, for example, a heavy snow storm that makes the roads to and from church difficult to drive, thereby increasing the full cost of attendance. Without a doubt, this member will become

less likely to attend. More importantly, we can aggregate this prediction and conclude that total attendance will be less than normal on such days. A similar phenomenon will arise on weekends with exceptionally good weather and three-day holiday weekends, since the "opportunity cost" of attendance rises with the increased availability of unusually attractive alternative activities. The argument extends to any event, attribute, or commitment that increases the "opportunity cost" of a person's time (and hence the cost of a morning spent in church) — project deadlines, special events, hectic stages in the life cycle. The same prediction applies to reduced benefits (the flip-side of costs) — a period of undistinguished stand-in preachers, the departure of many church friends, moving to a less pleasant facility, a cutback in child care and Sunday school services.

Again, the reader may object that these are obvious facts, which need neither theory nor graphs to back them up. But that is just the point. The law of demand, and most other fundamental economic theorems *are* obvious, and obviously correct. The power of rational choice lies in its having expressed these principles in verbal, graphical, and mathematical forms that allow us to apply, combine, and manipulate them *without* losing track of our own assumptions.⁶ And even though this particular example does not yield an esoteric theory of church attendance, it does correctly identify most of the factors that prove significant in survey studies of attendance.

The law of supply is scarcely more debatable than the law of demand and may apply even to psychotics (Hirshleifer and Glazer 1992:7). It predicts, among other things, that the charitable contributions "supplied" to a church will increase when the rewards for doing so increase (including, for example, more public recognition). It also predicts a

reduction in entrants to the priesthood, when its pay, power, and prestige decline relative to that of other occupations. It further implies that the supply of new religions (and hence the growth of new religions) will rise when barriers to entry fall (decreasing startup costs, and thus effectively increasing the net price that religious suppliers receive for their services). Again, the predictions are obvious; but again that is the point.

The beauty, of course, is that these simple laws combine to produce a large body of insights and unexpected predictions regarding the effect of taxes, subsidies, quotas, rationing, and more. A subsidy to religious private schooling (via laws that insure the deductibility of tuition) certainly will increase enrollments in Christian schools. A voucher system (which acts as an even larger subsidy) will increase it further still. At broader levels, the tax free status of religious organizations in the U.S. induces many groups to incorporate and advertise themselves as religions, and the First Amendment functions as a vast subsidy to religious dissent and pluralism in America (Finke 1990). A 1960 change in FCC regulations, permitting broadcasting stations to sell the religious air time they previously gave away, led to a massive decline in the previously subsidized liberal, mainline broadcasts (Hadden 1993). The 1965 repeal of immigration quotas (which limited the supply of Asian religious teachers) gave a major boost to new religions in this country (Melton 1987:52). David Martin (1990:13) notes that the Protestant explosion in Latin America was contingent upon "the general deregulation of religion." And religious and political deregulation on the opposite end of the globe have inaugurated a comparable period of religious ferment in Eastern Europe and the former Soviet Union (Hadden and Pankhurst 1993).

Historical relevance

Some scholars turn the preceding claims on their head, arguing that the very evidence of religious "economization" proves its limited relevance (Robertson 1992: 150).

According to this argument, religious traditions can only become "consumer commodities" (subject to individual choice and "the logic of market economics") within a modern, pluralistic society (Berger 1967: 138). The applicability of an economic perspective thus proves how far contemporary religion, especially American Protestantism, has strayed from its roots (Wilson 1982) and calls into question the perspective's capacity to illuminate any truly religious phenomenon (Bruce 1993, Heelas 1993).

Insofar as this argument encourages historical sensitivity and global comparisons, it certainly merits attention. A large body of social-scientific research traces the evolution of markets and capitalist institutions in medieval Europe and documents its immense political, social, and economic consequences. One might imagine a similar (and similarly illuminating) analysis of the emergence of "religious markets." Indeed, the most provocative recent histories of American religion do just this (Finke and Stark 1992, Hatch 1989).

But it would be a serious mistake to conclude that economic explanations apply only to modern times. To do so understates past opportunities for choice while also overlooking longstanding theories of non-competitive situations.

Stark and Bainbridge (1985: 111-122) have attacked "the illusion of a universal church," citing medieval Catholicism's continual and ultimately unsuccessful battles with heresy, schism, and dissent. Other state supported churches, such as the Church of England, had even more trouble maintaining a religious monopoly. I have already noted that choice, competition, and even "portfolio diversification" pervaded the Greco-Roman "religious economy." Competing religions filled the Roman Empire: civic worship of the old Greco-Roman gods, such as Zeus, Apollo, Artemis, Dionysus, and the like; Caesar worship; mystery religions of Isis, Mithras, Adonis, and others; magic and astrology; numerous schools of philosophy; and the intolerant faiths of Judaism and Christianity (Nock 1963). Japanese religious history reveals a complex mix of peaceful coexistence, spirited competition, and vigorous suppression. And Israel's sacred texts, from Genesis to Malachi, testify to the persistent lure and perennial presence of alternatives to the Jewish faith. Against the backdrop of the Old Testament prophets' condemnation of pervasive idolatry, apathy, materialism, and unbelief, the contemporary situation looks less unique.

It is, of course, true that modern society, particularly late twentieth century America society, provides a far wider range of choices than were previously available. Despite its many challenges, the Roman Catholic church *did* dominate medieval Europe's religious market, and the remnants of dominance still linger. But these facts hardly invalidate rational choice. Economic theory bristles with theories of imperfect competition — monopoly, cartels, monopolistic competition, oligopoly, and more. Insofar as historic religions kept their competitors at bay, these theories offer unique insights concerning market segmentation, price discrimination, collusion, and "economic rents." Indeed, the

first social scientific analysis of religion concerned the religious monopolies of medieval Catholicism and post-Reformation established Protestantism (Smith [1776] 1965: 740-766). For contemporary analyses of the medieval Catholic monopoly, see Anderson (1989a, 1989b) and Ekelund, Hebert, and Tollison (1989).

The strength of simplicity

In the end, most critics condemn rational choice for embracing too much and too little: too much, in that it assumes lightning powers of calculation, full information, and total self-control; too little, in that it fails to take account of preference formation, normative constraints, emotional impulses, social structures, and the like. Hence, it is said that more realistic models of human behavior must do more to acknowledge limitations of the human mind and the complexity of human culture (Etzioni 1988, Ferree 1992, Robertson 1992, Wuthnow 1991:273).

Fair enough. The rational choice model *is* unrealistic in this sense (although it may be misleading to ignore the growing body of economic research that seeks to incorporate altruism, envy, cognitive biases, addiction, and limited self-control).⁷ But while we being realistic about society, let us be realistic about ourselves. Researchers possess with the very limitations that they observe. Etzioni (1988:117), quoting Herbert Simon, makes much of the fact that the human brain can accommodate only three to seven items in short term memory. The "simple" assumptions of rational choice theory, like the pieces of a chess game or the postulates of a mathematical system, more than suffice to tax most people's powers of deduction. How much harder is it therefore to develop, test, and

extend models that incorporate cognitive limitations, preference formation, intra-personal conflict, normative-affective constraints, and social interdependence?

Scholars rightly criticize economic arguments that border on tautology or lack testability, but they must turn the same criticisms back upon every proposed alternative. Religious researchers must work toward explanations that are well-defined, consistent, and free of hidden leaps. Ordinary language jumps from X, to Y, to not-X, and never skips a beat. Formal modeling is about keeping one's notation straight, thereby avoiding the not-so-obvious contradictions and irrelevancies that creep into most verbal arguments, and simplifying assumptions help us grind through the logic that otherwise elude us. One cannot but admire those who attempt to build rigorous verbal theories within a complex framework of realistic behavioral principles.⁸ But recognizing the overwhelming difficulty of the task and the limited success to date, one must also sympathize with those who employ fewer assumptions and more formal analysis. In this respect, rational choice may well prove *more* realistic than its alternatives.

Conclusion

Social scientists have debated the merits of rational choice theory for decades, and I make no claim to have resolved matters with this essay. Nevertheless, I have sought to clarify some issues and counter some criticisms that are of particular relevance when evaluating rational approaches to religion. Rational choice seeks to fill the theory gap within the study of religion, redressing an historic imbalance that has favored the accumulation of data over the discovery of unifying concepts. It integrates existing research on the religious behavior of individuals, groups, and societies. It also yields new questions, new methods, and new hypotheses to guide empirical research. Its utilitarian language parallels the stated promises of most religions and the explanations many people give for their own religious behavior. Its most basic principles and predictions prove relevant to religious markets, both present and past, competitive and monopolistic. Its relative simplicity greatly facilitates statements and tests of theory.

It goes without saying that I encourage attempts to construct comprehensive rational choice models that unify existing insights, explain observed empirical regularities, and generate new research questions. Even so, it would be a mistake to interpret this position as "economic imperialism." One may harbor great hopes for one approach without denigrating every alternative.

Scholarly paradigms are subject to the same sort of diminishing returns that characterize other activities. Within the field of economics, which has been heavily mined with the tools of rational choice for more than a century, much of the most important

recent work rests on insights from sociology and psychology. Consider, for example, the research on labor markets by Akerlof (1984), Frank (1985), Granovetter (1984), and Williamson (1985). Or consider studies of uncertainty and risk, for decades dominated by expected utility theory, but now revitalized by new results on cognitive limitations, stemming from investigations of experimental psychologists (Kahneman, Slovic, and Tversky 1982).

Within the field of religious research, the situation is exactly reversed. Rational choice now offers a high rate of return precisely because of its previous neglect. For decades, scholars have scrutinized religion from every angle *except* that of rational choice. Explanations of religious phenomena have stressed socialization, indoctrination, neurosis, cognitive dissonance, tradition, deviance, deprivation, functionalism, the role of emotions, the impact of culture, and more. But rarely has anyone viewed religion as the product of cost-benefit decisions, and formal models of the religious behavior (rational or otherwise) scarcely exist. With so little previous work and so many potentially useful insights from microeconomics, exchange theory, and public choice, the marginal product of each additional project promises to be great.

If the recent past offers any guide, rational choice will especially benefit those seeking to build and test models of religious behavior, models that explain broad categories of religious phenomena in terms of relatively simple principles. The human capital approach to individual religious participation, the models of strict churches and religious portfolios, and the theory of religious markets are all cases in point. Ideographic research, which seeks to describe a single case or situation in all its fullness, may have less

to gain. Likewise, certain research questions (regarding, for example, emotional states, moral imperatives, preference change, and self-control) may prove difficult if not impossible to explain within the framework of pure rationality.

Still, one hesitates to concede any area of inquiry before the study of religion has accumulated more first-hand experience with the rational choice approach. Browsing the standard sociology of religion textbooks, one finds few topics that are by their very nature "off limits." Current work has already begun to address: the underlying nature of religion; the determinants individual religiosity and participation rates; conversion, commitment, and religious mobility; the emergence and viability of different types of religious institutions; secularization and its alternatives; deviant religions; the socioeconomic correlates of different types of religions; church-state issues; resource mobilization and the marketing of religion; plausibility problems; and more. The work is hardly definitive, but its future looks bright.

Notes

1. The defense should not be construed as an attack on alternative approaches, but merely an attempt dispel misperceptions regarding rational choice and its application to the study of religion.
2. Those skeptical of the fundamental validity of "nomothetic" social research (which seeks to uncover regularities and laws) will, of course, tend to reject any broad theoretical paradigm, in favor of more particularistic, "ideographic" methodologies.
3. This reference to the (monetary) value of time should not be viewed as an implicit assertion of the primacy of money. The predictions remain unchanged if we invert the model and value money in terms of its temporal (time-price) equivalent.
4. The principle exceptions are Glock and Stark's 1963 Northern California Bay Area survey, NORC's 1963 and 1974 surveys of American Catholics, and a 196x Jewish Fertility survey.
5. Positing different types of rationality (economic, social, legal, political, communal, and so forth) does not strike me as a meaningful alternative, although this distinction is advanced by some (Bruce 1993:203, c.f. Smelser 1976). Jon Elster argues for "one and the same notion of rationality ... independent of what discipline you are in" (Swedberg 1990:241), and Etzioni (1988:142) concludes that "none of [these alternatives] is in wide

use, and hence one must assume they are not productive."

6. For a taste of this power, compare a verbal description of a change in market equilibrium to a far simpler graphical depiction of a supply curve shift. Few college students can talk their way through the effects of an oil embargo, but once they recognize it as an inward shift of the supply curve, they are home free.

7. See for example Frank (1985, 1988). My own research on habit formation grew from the decision to model religious participation with reference to a person's past (Iannaccone 1984).

8. Etzioni (1988) outlines the general framework of one such model. The "prospect theory" of psychologists and behavioral economists may eventually coalesce into another alternative (Kahneman, Slovic, Tversky 1982).

References

- Akerlof, George A. 1984. *An Economic Theorist's Book of Tales*. Cambridge: Cambridge University Press.
- Anderson, Gary M. 1989a. "Invest Now for Your (Eternal) Retirement: The Economics of the Medieval Afterlife." Paper presented at the meetings of the Western Economic Association, Lake Tahoe.
- Anderson, Gary M. 1989b. "Judge, Jury, and Excommunicator: The Law Enforcement Activities of the Medieval Church." Working paper. Department of Economics, California State University, Northridge.
- Argyle, Michael, and Beit-Hallahmi, Benjamin. 1975. *The Social Psychology of Religion*. London: Routledge and Keagan Paul.
- Becker, Gary S. 1976. "The Economic Approach to Human Behavior." Chicago: University of Chicago Press.
- Berger, Peter L. 1967. *The Sacred Canopy*. Garden City, NY: Doubleday.
- Boland, Lawrence A. 1979. "A Critique of Friedman's Critics." *Journal of Economic Literature* 17(2,June):503-522.
- Bruce, Steve. 1993. "Religion and Rational Choice: A Critique of Economic Explanations of Religious Behavior." *Sociology of Religion* 54(2):193-205.
- Coleman, James S. 1990. *Foundations of Social Theory*. Cambridge: Belknap Press of Harvard University Press.

- Davis, Kingsley. 1937. "The Sociology of Prostitution." *American Sociological Review* 2:744-755.
- Durkheim, Emile. [1915] 1965. *The Elementary Forms of Religious Life*. Translated by Joseph Ward Swain. New York: Free Press.
- Ehrenberg, Ronald G. 1977. "Household Allocation of Time and Religiosity: Replication and Extension." *Journal of Political Economy* 85(2, April):415-423.
- Ekelund, Robert B. Jr.; Hebert, Robert F.; and Tollison, Robert D. 1989. "An Economic Model of the Medieval Church: Usury as a Form of Rent Seeking." *Journal of Law, Economics, and Organization* 5(2, Fall): 307-331.
- Elster, Jon. 1986. *Rational Choice*. Oxford: Blackwell.
- Etzioni, Amitai. 1988. *The Moral Dimension: Toward a New Economics*. New York: The Free Press.
- Feree, Myra Marx. 1992. "The Political Context of Rationality: Rational Choice Theory and Resource Mobilization." In *Frontiers in Social Movement Theory*, edited by Aldon D. Morris and Carol McClurg Mueller, 29-52. New Haven: Yale University Press.
- Finke, Roger. 1990. "Religious Deregulation: Origins and Consequences." *Journal of Church and State* 32(3): 609-26.
- Finke, Roger. 1992. "An Unsecular America." In *Religion and Modernization: Sociologists and Historians Debate the Secularization Thesis*, edited by Steve Bruce. Oxford: Clarendon Press.

- Finke, Roger, and Iannaccone, Laurence R. 1993. "Supply Side Explanations for Religious Change." *The Annals of the American Academy of Political and Social Science* 527 (May): 27-39.
- Finke, Roger, and Stark, Rodney. 1992. *The Churching of America*. New Brunswick, NJ: Rutgers University Press.
- Frank, Robert H. 1985. *Choosing the Right Pond: Human Behavior and the Quest for Status*. New York: Oxford University Press.
- Frank, Robert H. 1988. *Passions Within Reason: The Strategic Role of Emotions*. New York: Norton.
- Freud, Sigmund. [1927] 1961. *The Future of an Illusion*. Garden City, NY: Doubleday.
- Granovetter, Mark. 1985. "Economic Action and Social Structure: A Theory of Embeddedness." *American Journal of Sociology* 91:481-510.
- Greeley, Andrew M. and McManus, William E. 1987. *Catholic Contributions: Sociology and Policy*. Chicago, IL: The Thomas More Press.
- Hadden, Jeffrey K., and Pankhurst, Jerry G. 1993. "On Spitting With the Wind: Religious Organizational Vivaciousness in the Former Evil Empire." Paper presented at the Seminar on Religious Institutions of the Program on Nonprofit Organizations. Yale University, June 3-4.
- Hadden, Jeffrey K. 1993. "The Rise and Fall of American Televangelism." *The Annals of the American Academy of Political and Social Science* 527 (May): 113-130.
- Hatch, Nathan O. 1989. *The Democratization of American Christianity*. New Haven: Yale University Press.

- Heelas, Paul. 1993. "The Limits of Consumption and the Post-Modern 'Religion' of the New Age." In *The Authority of the Consumer*, edited by N. Abercrombie, R. Keat, and N. Whiteley. Routledge.
- Hirshleifer, Jack, and Glazer, Amihai. 1992. *Price Theory and Applications*. Fifth Edition. Englewood Cliffs, NJ: Prentice-Hall.
- Hoge, Dean R. 1981. *Converts, Dropouts, Returnees: A Study of Religious Change Among American Catholics*. Washington, DC: Pilgrim Press.
- Iannaccone, Laurence R. 1984. "Consumption Capital and Habit Formation with an Application to Religious Participation." Ph.D. dissertation, University of Chicago.
- Iannaccone, Laurence R. 1988. "A Formal Model of Church and Sect." *American Journal of Sociology* 94(supplement):S241-S268.
- Iannaccone, Laurence R. 1990. "Religious Participation: A Human Capital Approach." *Journal for the Scientific Study of Religion* 29(3):297 - 314.
- Iannaccone, Laurence R. 1991a. "The Consequences of Religious Market Structure: Adam Smith and the Economics of Religion." *Rationality and Society* 3(2):156 - 177.
- Iannaccone, Laurence R. 1992a. "Religious Markets and the Economics of Religion." *Social Compass* 39(1):123-131.
- Iannaccone, Laurence R. 1992b. "Sacrifice and Stigma: Reducing Free-Riding in Cults, Communes, and Other Collectives." *Journal of Political Economy* 100(2): 271-291.

- Iannaccone, Laurence R. 1994. "Why Strict Churches are Strong." *American Journal of Sociology* 99(5): 1180-1211.
- Iannaccone, Laurence R. [In press - A]. "Risk, Rationality, and Religious Portfolios." *Economic Inquiry*.
- Iannaccone, Laurence R. [In press - B]. "Rational Choice: Framework for the Social Scientific Study of Religion." Chapter in *Assessing Rational Choice Theories of Religion*, edited by Lawrence Young. Routledge Press.
- Iannaccone, Laurence R., Olson, Daniel V. A., and Stark, Rodney. [In press]. "Religious Resources and Church Growth." *Social Forces*.
- Kahneman, Daniel, Slovic, Paul, and Tversky, Amos, (eds.). 1982. *Judgment Under Uncertainty: Heuristics and Biases*. New York: Cambridge University Press.
- Kagel, J. H., Rachlin, H., Green, L., Battalio, R. C., Basman, R. L., and Klemm, W. R. 1975. "Experimental Studies of Consumer Demand Behavior Using Laboratory Animals." *Economic Inquiry* 13(1): 22 - 38.
- Lee, Richard R. 1992. "Religious Practice as Social Exchange." *Sociological Analysis* 53(10): 1-35.
- McGuire, Meredith B. 1987. *Religion: The Social Context*. Second Edition. Belmont, CA: Wadsworth.
- Martin, David. 1990. *Tongues of Fire: The Explosion of Protestantism in Latin America*. Oxford: Basil Blackwell.
- Melton, J. Gordon. 1987. "How New is New? The Flowering of the 'New' Religious Consciousness since 1965" In *The Future of New Religious Movements*, edited by

- David G. Bromley and Phillip E. Hammond. Macon, GA: Mercer University Press, pp. 46-56.
- Moberg, David O. 1984. *The Church as a Social Institution: The Sociology of American Religion, second edition*. Grand Rapids, MI: Baker Book House.
- Monroe, Kristen R. [In press]. "Rational Actor Theory and Fundamentalism." In xxxxx (Fundamentalism Project, Vol 5) edited by Martin Marty and Scott Appleby. Chicago: University of Chicago Press.
- Montgomery, James. 1994. "The Dynamics of the Religious Economy: Exit, Voice, and Denominational Secularization." Unpublished Ms. Evanston, IL: Northwestern University.
- Nock, Arthur Darby 1963. *Conversion: The Old and the New in Religion from Alexander the Great to Augustine of Hippo*. London: Oxford University Press.
- Parsons, Talcott. 1968. *The Structure of Social Action (vol 1)*. London: Collier-Macmillan.
- Pautler, Paul. 1977. "Religion and Relative Prices." *Atlantic Economic Journal* 5 (March): 69-73.
- Roberts, Keith A. 1990. *Religion in Sociological Perspective*. Second Edition. Belmont, CA: Wadsworth.
- Robertson, Roland. 1992. "The Economization of Religion? Reflections on the promise and limitations of the Economic Approach." *Social Compass* 39(1,March): 147-157.

- Robbins, Thomas. 1988. *Cults, Converts, and Charisma: The Sociology of New Religious Movements*. London: Sage.
- Sherkat, Darren E., and Wilson, John. 1993. "Preference and Choice in Religious Markets: An Examination of Religious Switching and Apostasy." Mimeo: Vanderbilt University.
- Smelser, Neil J. 1976. "On the Relevance of Economic Sociology for Economics." In *Economics and Sociology: Towards an Integration*, edited by Tjerk Huppes, 1-26. Leiden: Martinus Nijhoff.
- Smith, Adam. 1965 [1776]. *An Inquiry into Nature and Causes of The Wealth of Nations*. New York: Modern Library.
- Stark, Rodney, and Bainbridge, William S. 1985. *The Future of Religion*. Berkeley, CA: University of California Press.
- Stark, Rodney, and Bainbridge, William S. 1987. *A Theory of Religion*. New York: Peter Lang.
- Sullivan, Dennis H. 1985. "Simultaneous Determination of Church Contributions and Church Attendance." *Economic Inquiry* 23(2, April):309-320.
- Swedberg, Richard. *Economics and Sociology. Redefining their Boundaries: Conversations with Economists and Sociologists*. Princeton: Princeton University Press, 1990.
- Warner, R. Stephen. 1993. "Work in Progress Toward a New Paradigm in the Sociology of Religion." *American Journal of Sociology* 98(5):1044-93.

- Williamson, Oliver E. 1985. *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. New York: Free Press.
- Wilson, Bryan. 1966. *Religion in Sociological Perspective*. Oxford: Oxford University Press.
- Wuthnow, Robert J. 1988. "Sociology of Religion," In *Handbook of Sociology*, edited by Neil J. Smelser, 473-509. Newbury Park: Sage.
- Wuthnow, Robert. 1991. "Religion as Culture," in David G. Bromley (ed.) *Religion and the Social Order*, Vol 1. Greenwich, CT: JAI Press.
- Yinger, J. Milton. 1970. *The Scientific Study of Religion*. New York: Macmillan.
- Young, Lawrence, editor. [In press]. *Assessing Rational Choice Theories of Religion*. Routledge.